

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 2684

THE NASHVILLE, CHATTANOOGA & ST. LOUIS
RAILWAY COMPANY

REPORT IN RE ACCIDENT

AT SMYRNA, TENN., ON

MARCH 1, 1943

SUMMARY

Railroad: Nashville, Chattanooga & St. Louis
Date: March 1, 1943
Location: Smyrna, Tenn.
Kind of accident: Side collision
Trains involved: Engine and cars : Freight
Train number: 20 : Extra 555 North
Engine numbers: 612 : 555
Consist: 12 cars : 30 cars, caboose
Estimated speed: 2 m. p. h. : 12 m. p. n.
Operation: Timetable, train orders and
automatic block-signal system
Track: Single; tangent; 0.9 percent
descending grade northward
Weather: Clear
Time: 6:34 p. m.
Casualties: 1 killed; 4 injured
Cause: Accident caused by engine fouling
main track immediately in front
of an approaching train without
authority or protection

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 2684

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS
UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE NASHVILLE, CHATTANOOGA & ST. LOUIS
RAILWAY COMPANY

April 27, 1943.

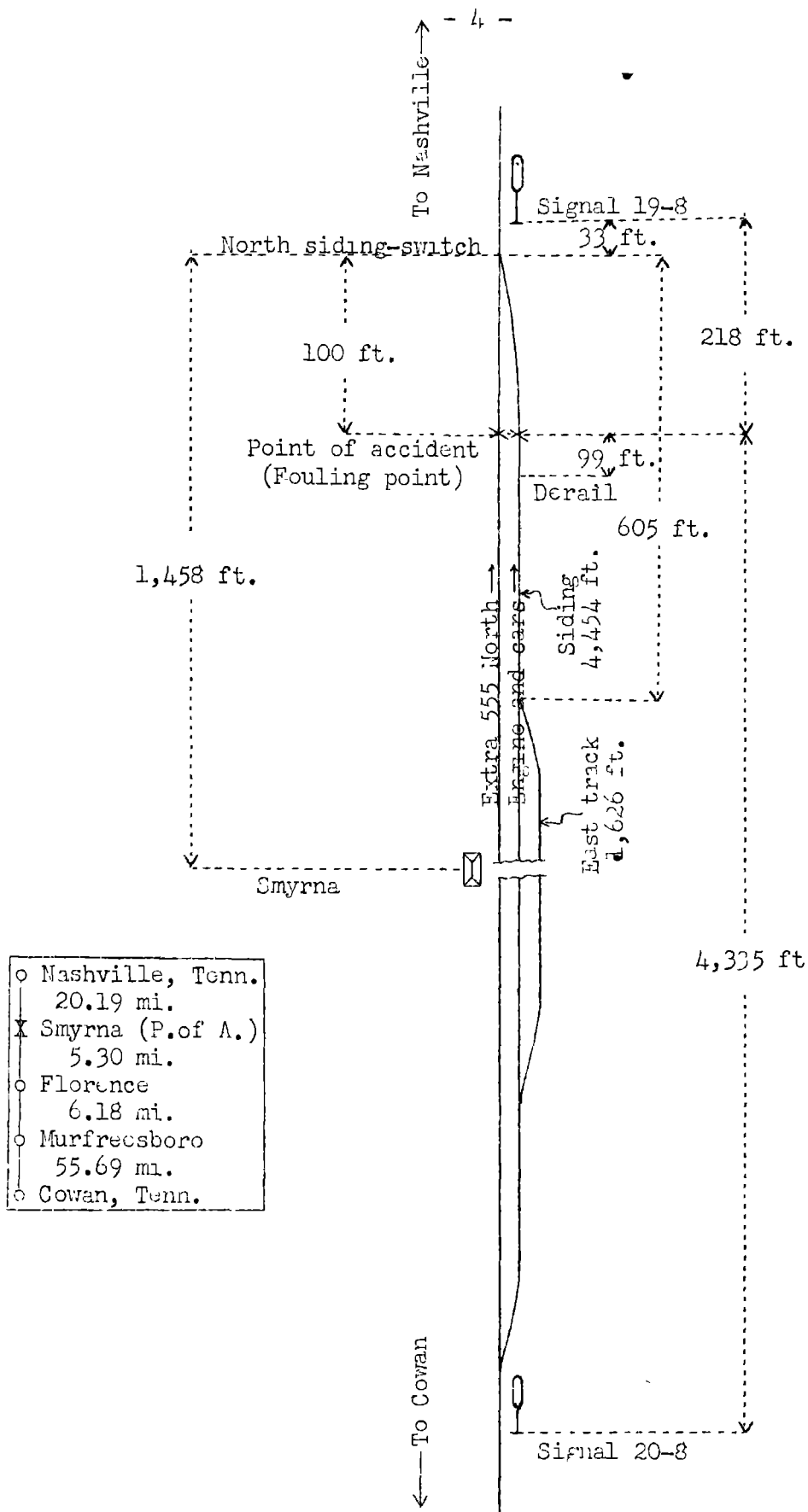
Accident at Smyrna, Tenn., on March 1, 1943, caused by an
engine fouling the main track immediately in front
of an approaching train without authority or protection.

REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On March 1, 1943, there was a side collision between a freight train and an engine on the Nashville, Chattanooga & St. Louis Railway at Smyrna, Tenn., which resulted in the death of one employee and the injury of four employees.

¹Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 2684
 Nashville, Chattanooga & St. Louis Railway
 Smyrna, Tenn.
 March 1, 1943

Location of Accident and Method of Operation

This accident occurred on that part of the Chattanooga Division which extends between Cowan and Nashville, Tenn., 37.36 miles. In the vicinity of the point of accident this is a single-track line over which trains are operated by timetable, train orders and an automatic block-signal system. At Smyrna a siding 4,454 feet in length parallels the main track on the east. The north switch of this siding is 1,458 feet north of the station. The accident occurred at the fouling point of the turnout about 100 feet south of the north siding-switch. Approaching from the south the track is tangent a distance of more than 1 mile to the point of accident. At the point of collision the grade for north-bound trains is 0.9 percent descending.

A derail is located on the east rail of the siding at a point 199 feet south of the switch and 14 feet south of the clearance point. This derail is connected to the north siding-switch and operates in conjunction with it. When the north siding-switch is lined for a main-track movement, the derail is in derailing position. An industry track 1,626 feet in length parallels the siding on the east. The north switch of this track is 605 feet south of the north siding-switch.

Automatic signals 20-8 and 19-8, which govern north-bound movements, are located, respectively, 4,335 feet south and 218 feet north of the point of accident. These signals are of the color-light type and are approach lighted.

Operating rules read in part as follows:

99. When a train stops or is delayed, under circumstances in which it may be struck, the flagman must go back immediately with stop signals a sufficient distance to insure full protection, * * *

* * *

512 (c). A switch must not be opened to permit a train movement to the main track, nor must a train come within fouling distance of the main track, unless such train is authorized by rule, time-table or train order to occupy main track or is protected as required by Rule 99.

Time-table special rules read in part as follows:

9. Extras may pass and run ahead of third class trains.

The maximum authorized speed for freight trains is 45 miles per hour.

Description of Accident

No. 20, a north-bound third-class freight train, consisting of engine 612, 10 loaded cars and a caboose, was en route from Cowan to Nashville. It entered the siding at Smyrna and stopped into clear at 4:57 p. m. About 6:34 p. m. engine 612, pulling 12 cars, was moving northward on the siding at a speed of about 2 miles per hour when the engine fouled the main track on the turnout of the north siding-switch and was struck by Extra 555 North.

Extra 555 North, a north-bound freight train, consisted of engine 555, 20 loaded and 10 empty cars and a caboose. This train departed from Murfreesboro, 11.48 miles south of Smyrna and the last open office, at 6:12 p. m., according to the dispatcher's record of movement of trains, passed signal 20-8, which displayed proceed, and while moving at a speed of about 12 miles per hour it collided with engine 612. The brakes of this train had been tested and had functioned properly en route.

Engine 612 and the first car overturned to the right and stopped bottoms up and considerably damaged, east of the siding and parallel to it, with the front end of the engine opposite the north siding-switch. The second and third cars were derailed but remained upright and in line with the siding. The front truck of the third car was derailed. Engine 555 and its tender were derailed and stopped upright in line with the main track, with the front end of the engine about 210 feet north of the point of accident. The pilot beam and the right cylinder-head were broken. The first and second cars were slightly damaged.

It was clear and daylight at the time of the accident, which occurred about 6:34 p. m.

The employee killed was the engineer of No. 20. The employees injured were the swing brakeman of No. 20, and the engineer, the front brakeman and the flagman of Extra 555.

Discussion

The rules governing operation in automatic block-signal territory on this line provide that flag protection must be furnished before a movement is made from a siding to the main track unless the movement is authorized by the rules or by train order. Extra trains may pass and run ahead of third-class

trains. These requirements were understood by the surviving members of both crews involved.

No. 20, a north-bound third-class freight train, entered the siding at Smyrna and stopped into clear at 4:37 p. m. About 6:34 p. m. while engaged in switching, the engine, pulling 12 cars, fouled the main track on the turnout of the north siding-switch and was struck by Extra 555 North. No train order restricting the authority of Extra 555 to proceed had been issued. Under the rules, the crew of No. 20 was required to provide flag protection before their engine moved beyond the clearance point of the north siding-switch.

As Extra 555 was approaching Smyrna, the speed was 25 or 30 miles per hour. The enginemen and the front brakeman were maintaining a lookout ahead. The last automatic signal passed by this train displayed proceed. The first warning the crew had of anything being wrong was when their engine reached a point about 1,200 feet south of the north siding-switch and they saw stop signals being given from a point about 200 feet distant. The engineer immediately moved the brake valve to emergency position but he could not stop his train short of engine 612. The speed of Extra 555 was about 12 miles per hour when the collision occurred.

The conductor of No. 20 said he received information from the operator at Smyrna about 6:35 p. m. that No. 94, a north-bound first-class train, would pass Florence, 5.3 miles south of Smyrna, at 6:05 p. m., and that Extras 575 and 555 North were following closely behind No. 94. He said he gave this information to his engineer but did not inform the front brakeman. No. 94 passed Smyrna about 6:11 p. m. and Extra 575 passed about 6:29 p. m. About 6:33 p. m. engine 612 pulled 12 cars northward from the industry track to the siding and stopped with the engine standing just south of the derail. The conductor went to the station to confer with the dispatcher. He expected his engine to remain into clear on the siding until Extra 555 passed, but he did not instruct any member of his crew accordingly. The flagman was in the vicinity of the caboose at the south end of the siding. The conductor and the flagman said they did not know that their engine had fouled the main track until after the accident occurred. The swing brakeman said he gave signals for the engineer to stop the movement when he saw the engine and cars moving northward after the stop was made at the derail, but the signals were not acted upon. Then he ran to the main track and gave signals for Extra 555 to stop. The fireman and the front brakeman of No. 20 said their engineer instructed the front brakeman to open the north siding-switch soon after the stop was made at the derail. The

front brakeman lined the switch for the siding but he did not see Extra 555 approaching in time to take action to prevent the accident. The fireman said he first saw Extra 555 approaching when his engine entered the turnout. He called a warning to the engineer, who immediately moved the brake valve to emergency position but the engine could not be stopped short of the fouling point of the turnout. It could not be determined why the engineer of No. 20 permitted his engine to foul the main track without authority or protection, as he was killed in the accident.

Cause

It is found that this accident was caused by an engine fouling the main track immediately in front of an approaching train without authority or protection.

Dated at Washington, D. C., this twenty-seventh day of April, 1943.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.